



# **SHIPBOARD OBSERVATIONS**

**UNITED STATES NAVY MANUAL FOR SHIP'S SURFACE WEATHER OBSERVATIONS (NMOCINST 3144.1D)**

# SHIP SYNOPTIC CODE (SECT 1)

- **BBXX** (STANDARD ENTRY FOR ALL SHIPS)
- SHIP'S FOUR LETTER CALL SIGN OR IDENTIFIER
- EX: NJAM, NTIC, ETC

SECTION 0																		
	SHIP FOUR LETTER CALL SIGN				DAY OF MONTH		TIME OF OBS		WIND INDICAT	POSITION OF SHIP								
					01-31 UTC		00-23 UTC			POSITION IN	LATITUDE  DEGREES & TENTHS			QUADRANT	LONGITUDE  DEGREES & TENTHS			
BBXX	0000				Y	Y	G	G	Iw	99	La	La	La	Qc	Lo	Lo	Lo	Lo
BBXX	N	J	A	M						99								
BBXX	N	J	A	M						99								
BBXX	N	J	A	M						99								



# SHIP SYNOPTIC CODE (SECT 1 CONT)

• YYGGIw 99LaLaLa QcLoLoLoLo

YY: DAY OF THE MONTH

ENTER 2 DIGITS **01** THROUGH **31**

GG: TIME OF SYNOPTIC

ENTER **00, 03, 06, 09, 12, 15, 18, 21**,

Iw: WIND SPEED INDICATOR

ENTER "4" IF MEASURED USING THE SHIPS

ANEMOMETER ENTER "3" IF WINDS ARE

ESTIMATED (*PMQ-3 READINGS ARE MEASURED*).

					SECTION 0													
	SHIP FOUR LETTER CALL SIGN				DAY 0 F M  01-31 UTC		TIME 0 F 0 NEAREST 00-23 UTC		WIND INDI	POSITION	POSITION OF SHIP							
											LATITU  DEGREES & TENIHS			QUADRAN	LONGIT  DEGREES & TENIHS			
BBXX	OOOO				Y	Y	G	G	Iw	99	La	La	La		Qc	Lo	Lo	Lo
BBXX	N	J	A	M	0	3	0	0	4	99								
BBXX	N	J	A	M	0	3	0	6	4	99								
BBXX	N	J	A	M	0	3	1	2	4	99								

# SHIP SYNOPTIC CODE (SECT 1 CONT)

- LATITUDE AND LONGITUDE DATA IS ENTERED EXACTLY THE SAME AS IN COLUMN A  
(PART A ABOVE)
- DIVIDE TENTHS DIGIT BY 6 AND DISREGARD THE REMAINDER.

SECTION 0																
SHIP FOUR LETTER CALL SIGN	DAY OF MONTH 01-31 UTC	TIME OF OBS. NEAREST H 00-23 UTC	WIND INDICAT	POSITION OF SHIP												
				POSITION IN	LATITUDE			QUADRANT	LONGITUDE				DEGREES & TENTHS			
BBXX	OOOO	Y Y	G G	Iw	99	La	La	La	Qc	Lo	Lo	Lo	Lo	Lo	Lo	Lo
BBXX	N J A M	0 3	0 0	4	99	3	2	7	7	1	2	5	6	6	6	6
BBXX	N J A M	0 3	0 6	4	99	3	2	7	7	1	2	5	6	6	6	6
BBXX	N J A M	0 3	1 2	4	99	3	2	7	7	1	2	5	6	6	6	6

# SHIP SYNOPTIC CODE

## (IrIxhVV)

- Ir:** PRECIPITATION DATA INDICATOR  
**ALWAYS ENTER 4** SHIPS DO NOT MEASURE PRECIPITATION.
- Ix:** PRESENT WEATHER DATA INDICATOR  
**ENTER 1 TO INCLUDE** PRESENT/PAST WEATHER GROUP (7wwW1W2)  
**OR ENTER 3 TO OMIT** (NONE OBSERVED)
- h:** HEIGHT OF THE BASE OF THE LOWEST CLOUD. (**LOWEST LAYER IN COL 10**)

CODE FOR CLOUD HEIGHT, h	
CODE FIGS.	HEIGHT IN FEET
0	00 TO 99
1	100 TO 299
2	300 TO 699
3	700 TO 999
4	1000 TO 1999
5	2000 TO 3299
6	3300 TO 4899
7	4900 TO 6499
8	6500 TO 7999
9	8000 OR ABV OR NO CLOUDS
/	HEIGHT NOT KNOWN

# SHIP SYNOPTIC CODE

## (IrI<sub>x</sub>hVV CONT)

- **“VV” - VISIBILITY:**

ENTER THE CODE FIGURE (SEE **TABLE**) THAT REPRESENTS THE LOWEST VISIBILITY VALUE OBSERVED (**LOWEST VALUE IN THE SECTORS**).

- THIS IS NOT NECESSARILY THE SAME AS THE VALUE ENTERED IN *COL 7 OF PART A*.
- *CODE VALUE “98” WILL BE THE HIGHEST VALUE.*

### CODE

			90-99	
Ir	I <sub>x</sub>	h	V	V
4	1	3	9	6
4	3	7	9	6
4	3	9	9	7

### TABLE

VISIBILITY	(VV)
VISIBILITY	CODE
NM	FIGS.
<1/16	90
1/16	91
1/8	92
1/4	93
1/2	94
1 OR 1/1/2	95
2, 2-1/2, OR 3	96
5, 6, 7, OR 8	97
9 OR 10	98
NOT REPORTED	99

# SHIP SYNOPTIC CODE

## SHIPS COURSE, SPEED & APPARENT WIND DATA

**THIS INFORMATION IS ENTERED ON THE FORM  
BUT NOT TRANSMITTED**

- COURSE AND SPEED DATA WILL BE THE SAME AS THAT ENTERED IN COLS B AND C.
- APPARENT WIND IS THE OBSERVED  
**RELATIVE WIND DIRECTION/SPEED.**

PRECIPITATION DATA INDICATOR					SHIP'S COURSE AT TIME OF OI				SHIP'S SPEED AT TIME OF OB				DIRECTION RELATIVE TO SHIP FROM 0-360				SPEED			
WEATHER CODE INDICATOR (1 C					TRUE				KNOTS				KNOTS							
HEIGHT OF LOWEST CLOUD																				
VISIBILITY																				
90-99																				
					ESTIMATED ( )															
					ANEMOMETER (X)															
					AN HGT. 33m															
4 1 3 9 6					076 08 350 04															
4 3 7 9 6					090 15 330 12															
4 3 9 9 7					080 08															



# SHIP SYNOPTIC CODE (Nddff)

**“N” - TOTAL AMOUNT OF SKY COVER IN EIGHTHS**

**“dd” - TRUE WIND DIRECTION IN TENS OF DEGREES FROM THE DIRECTION THE WIND IS BLOWING.**

**- ENTRY WILL BE THE *SAME AS COL 3 OF PART A***

**“ff” - TRUE WIND SPEED IN KNOTS (07, 32).**

					SECTION 1									
TOTAL CLOUD AMOUNT TRUE WIND					HIGH SPEED WIND				TEMPERATURES					
					GROUP INDICATOR	SPEED			GROUP INDICATOR	SIGN OF TEMP (-)	DRY BULB  (Degrees & Tenths) °C			
DIRECTION FROM	SPEED	KNOTS	f	f		f	1	S <sub>n</sub>			T	T	T	
Z	d	d	f	f	00	f	f	f						
5	3	3	1	2										
7	3	1	0	6										
8	0	0	0	0										

# SHIP SYNOPTIC CODE HIGH SPEED WIND & TEMPERATURE

- HIGH SPEED WIND:** OMIT IF WINDS ARE <100 KNOTS **TEMPERATURE & DEWPOINT:**

- **(1snTTT 2snTdTdTd)**

- **“sn”** SIGN OF TEMPERATURE (POSITIVE OR NEGATIVE)

**0** = POSITIVE OR ZERO

**1** = NEGATIVE

- **TTT** AIR TEMP IN TENTHS OF DEGREE CELSIUS

**TdTdTd** DEWPOINT TEMP IN TENTHS OF DEGREES CELSIUS

**EXAMPLES:** TEMP: 10.3 C DEWPOINT: 8.0 C

TEMP: 00.5 C DEWPOINT: -2.0 C

TEMP: -05.0 C DEWPOINT: -10.0 C

WIND													
GROUP INDICATOR	SPEED			GROUP INDICATOR	SIGN OF TEMP (+ =	Dry Bulb	DRY BULB	(Degrees & Tenths	GROUP INDICATOR	SIGN OF DP (+ = 0	DEW POINT	DEW POINT	Dewpoint (Whole D
	KNOTS												
00	f	f	f	1	S <sub>b</sub>	T	T	T	2	S <sub>b</sub>	T <sub>a</sub>	T <sub>a</sub>	T <sub>a</sub>
				1	0	1	0	3	2	0	0	8	
				1	0	0	0	5	2	1	0	2	/
				1	1	0	5	0	2	1	1	0	/

# SHIP SYNOPTIC CODE SEA LEVEL PRESSURE (4PPPP)

- ENTERED IN TENS, UNITS, AND TENTHS OF A MILLIBAR
- WHEN SEA LEVEL PRESSURE IS 1000 MB OR GREATER, THE LEADING 1 IS OMITTED.

EXAMPLES:    992.4 MB  
                      1000.0 MB  
                      1032.1 MB

					SECTION 1																			
PRESSURE					3-HOUR PRESSURE CHANGE					WEATHER		PAST		CLOUDS				ACTUAL TIME OF OBSERVATION						
TENS	UNITS	TENTHS	HUNDRETHS	THOUSANDTHS	TENS	UNITS	TENTHS	HUNDRETHS	THOUSANDTHS	TENS	UNITS	TENTHS	HUNDRETHS	THOUSANDTHS	TENTHS	UNITS	TENTHS	HUNDRETHS	THOUSANDTHS	TENTHS	UNITS	TENTHS	HUNDRETHS	THOUSANDTHS
4	P	P	P	P	5	a	p	p	p	7	W	W	W <sub>1</sub>	W <sub>2</sub>	8	N <sub>h</sub>	C <sub>L</sub>	C <sub>M</sub>	C <sub>H</sub>	9	G	G	9	9
4	9	9	2	4	5					7					8					9				
4	0	0	0	0	5					7					8					9				
4	0	3	2	1	5					7					8					9				

# SHIP SYNOPTIC CODE PRESSURE TENDENCY (5appp),

- NOT ENTERED WHEN THE SHIP IS UNDERWAY.
- ENTERED WHEN THE SHIP IS ANCHORED.
- TENDENCIES ARE CALCULATED USING THE CHANGE AND CHARACTERISTIC RECORDED ON THE FORM DURING THE PAST 3 HOURS. (NOT INCLUDING THIS SYNOPTIC TIME).
- USING THE TENDENCY CHART PROVIDED, OBSERVE THE 3 HOUR TENDENCY IN PART 1 OF THE OBSERVATION FORM.

**EXAMPLE :** (USE SEA LEVEL PRESSURE COL 22a)

1159Z PRESSURE: 1025.5

1256Z PRESSURE: 1015.5 DOWN

1358Z PRESSURE: 1005.0 DOWN

NET CHANGE: 20.5

SECTION 1																				
PRESSURE					WEATHER				CLOUDS				ACTUAL TIME OF OBSERVATION							
					3-HOUR PRESSURE CHANGE				PAST											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9	0-9
4	P	P	P	P	5	a	p	p	7	W	W	W <sub>1</sub>	8	N <sub>h</sub>	C <sub>L</sub>	C <sub>M</sub>	9	G	G	9
4	9	9	2	4	5	7	1	7	7				8				9			
4	0	0	0	0	5				7				8				9			
4	0	3	2	1	5				7				8				9			



# SHIP SYNOPTIC CODE

## PRESENT WEATHER (7<sub>ww</sub>W1W2)

### THE 99 TYPES OF PRESENT WEATHER

REFER TO THE PRESENT WEATHER TABLE

**“WW” - PRESENT WEATHER AT OBSERVATION TIME**

INDICATED IN COL 9 OF PART 1: (USE THE FIRST VALUE)

**EXAMPLE:** SHRA FG      TABLE CODE: 81

**“W1W2” - PAST WEATHER**

EVEN SYNOPTIC - PAST 6 HOURS, ODD - PAST 3 HOURS.

**W1:** HIGHEST PRIORITY (USE TABLE BELOW RIGHT)

**W2:** SECOND HIGHEST PRIORITY (USE SAME TABLE)

- ENTER **70000** FOR NO SIGNIFICANT PRESENT/PAST WEATHER

### PAST WEATHER

WEATHER					CLOUDS				
				PAST					
0-99									
7	W	W	W <sub>1</sub>	W <sub>2</sub>	8	N <sub>h</sub>	C <sub>L</sub>	C <sub>M</sub>	C <sub>H</sub>
7	8	1	1	0	8				
7	/	/	/	/	8				
7	8	1	1	0	8				

Codes for Past Weather, W <sub>1</sub> W <sub>2</sub>	
Code	
9	Thunderstorm(s) with or without precipitation
8	Shower(s)
7	Snow, or rain and snow mixed
6	Rain
5	Drizzle
4	Fog, ice fog, or thick haze (visibility was less than 1/2 nautical mile)
3	Sandstorm, dust storm, or blowing snow
2	Cloud cover more than 1/2 throughout period
1	Cloud cover more than 1/2 for part of period, and 1/2 or less for another part period
0	Cloud cover 1/2 or less throughout period

# SHIP SYNOPTIC CODE

## THE CLOUD GROUP (8NhClCmCh)

- **"Nh"**: AMOUNT OF LOW OR MID CLOUD PRESENT  
ENCODE 9 WHEN SKY IS OBSCURED ( EX: FOG)
- **"Cl"**: LOW CLOUD PRESENT  
**"Cm"**: MID CLOUD PRESENT
- **"Ch"**: HIGH CLOUD PRESENT

### EXAMPLES FROM COL 10:

FEW10 SCT43 BKN180 CODED: 84803

BKN8 OVC25: CODED 888//

CLEAR SKIES ENTER 80000

WEATHER					CLOUDS					ACTUAL TIME OF OBSERVATION				
		PAST												
0-99														
7	W	W	W <sub>1</sub>	W <sub>2</sub>	8	N <sub>h</sub>	C <sub>L</sub>	C <sub>M</sub>	C <sub>H</sub>	9	G	G	9	9
7					8	8	4	0	3	9				
7					8	8	8	6	0	9				
7					8	0	0	6	0	9				







# SHIP SYNOPTIC CODE (9GGgg)

- IDENTIFIES THAT THE ACTUAL TIME OF OBSERVATION WAS NOT WITHIN THE DESIGNATED 10 MINUTE (45 - 55 MINUTES PAST THE HOUR) TIME FRAME.
  - DUE TO SHIPBOARD OPERATIONS/EXERCISES.
  - NOT USUALLY INCLUDED
- “GG”: HOUR IN UTC (TENS AND UNIT).
- “gg”: MINUTES (TENS AND UNITS).

WEATHER					CLOUDS					ACTUAL TIME OF OBSERVATION					
					PAST										
	0-99														
7	W	W	W <sub>1</sub>	W <sub>2</sub>	8	N <sub>d</sub>	C <sub>L</sub>	C <sub>M</sub>	C <sub>H</sub>	9	G	G	9	9	
7					8					9	1	6	0	5	
7					8					9	1	6	4	0	
7					8					9	1	7	3	0	

## SYNOPTIC CODE (SECT 2) SHIPS COURSE & SPEED (222DsVs)

- **“Ds”**: COURSE MADE GOOD DURING THE 3 HOURS PRECEDING THE OBSERVATION
  - USE 8 POINTS OF THE COMPASS (EX: 1=NE, 4=S, 8=N)
  - ENTER “9” IF DIRECTION UNKNOWN
  - ENTER “/” IF ANCHORED
- **“Vs”**: SHIPS AVERAGE SPEED MADE GOOD DURING THE 3 HOURS PROCEEDING THE TIME OF OBSERVATION (USE TABLE BELOW RIGHT).

SECTION 2								
SHIP'S COURSE AND SPEED			SEA SURFACE TEMPERATURE					
GROUP A INDICAT		COURSE M AVG SPD M		GROUP I	SIGN TYP	DEGREES  °C		
222		D <sub>s</sub>	V <sub>s</sub>	0	S <sub>s</sub>	T <sub>w</sub>	T <sub>w</sub>	T <sub>w</sub>
222		0	2	0				
222		3	3	0				
222		5	4	0				

Code for Ship's Average Speed, V <sub>s</sub>	
Code Figures	True Speed
0	0 knot
1	1 to 5 knots
2	6 to 10 knots
3	11 to 15 knots
4	16 to 20 knots
5	21 to 25 knots
6	26 to 30 knots
7	31 to 35 knots
8	36 to 40 knots
9	Over 40 knots
/	Not reported

# SHIP SYNOPTIC CODE

## SEA SURFACE TEMPERATURE

### (0SsTwTwTw)

- **“Ss”**: SIGN OF THE SEA TEMP
  - ENTER “0” FOR POSITIVE
  - ENTER “1” FOR NEGATIVE
- **“TwTwTw”**: SEA SURFACE TEMPERATURE IN CELSIUS. (NEAREST 1/10)
  - OMIT GROUP IF SEA TEMP CANNOT BE OBSERVED.

**SEA TEMP:** 12.4 C  
1.1 C  
15.0 C

SHIP'S COURSE AND SPEED			SECTION 2 SEA SURFACE TEMPERATURE				
GROUP AND SECTION	INDICATOR		COURSE MADE GOOD - 3 HOURS	AVG SPEED MADE GOOD - 3 HOURS	GROUP INDICATOR	SIGN TYPE OF TEMP. (0-7)	DEGREES AND TENTHS
							° C
222			D <sub>s</sub>	V <sub>s</sub>	0	S <sub>s</sub>	Tw Tw Tw
222			#	N	0	0	1 2 4
222			W	W	0	1	0 1 1
222			W	W	0	0	1 5

# SHIP SYNOPTIC CODE

## SEA WAVES

### (2PwPwHwHw)

- **“PwPw”: PERIOD OF SEA WAVES**  
ENTER THE SAME AS IN COL E ABOVE
- **“HwHw”: HEIGHT OF SEA WAVES (IN 1/2 METERS)**  
MATCH THE HEIGHT ENTERED IN COL F TO THE TABLE AND ENTER VALUE FROM TABLE.
- **COL E ENTRY: (0304)**
- **“HwHw” ENTRY: (20302)**

					SECTION 2														
					WAVES														
SEA WAVES					SWELLS														
GROUP	INDICATOR	PERIOD (s)	HEIGHT (H)	HEIGHT (H)	DIRECTION FROM				PREDOMINATE SWELL				SECONDARY SWELL						
					INDICATOR	PREDOMINANT SWELL	SECONDARY SWELL		INDICATOR	PERIOD (s)	HEIGHT (Half Met)		INDICATOR	PERIOD (s)	HEIGHT (Half Met)				
2	P <sub>w</sub>	P <sub>w</sub>	H <sub>w</sub>	H <sub>w</sub>	3	d <sub>w1</sub>	d <sub>w1</sub>	d <sub>w2</sub>	d <sub>w2</sub>	4	P <sub>w1</sub>	P <sub>w1</sub>	H <sub>w1</sub>	H <sub>w1</sub>	5	P <sub>w2</sub>	P <sub>w2</sub>	H <sub>w2</sub>	H <sub>w2</sub>
2	0	3	0	2	3					4					5				
2					3					4					5				
2					3					4					5				



# SHIP SYNOPTIC CODE DIRECTION OF SWELLS (3Dw1Dw1Dw2Dw2)

## DIRECTION OF PRIMARY & SECONDARY SWELL WAVES

- **“Dw1Dw1”: DIRECTION OF PRIMARY SWELL WAVES.**
  - ENTER IN HUNDREDS AND TENS THE DIRECTION FROM WHICH THE SWELLS ARE COMING.
  - WHEN NONE ARE VISIBLE ENTER “//”
  - IF NO SWELL IS OBSERVED ENTER: 30000.
  
- **“Dw2Dw2”: DIRECTION OF SECONDARY SWELL WAVES.**
  - ENTER THE SAME AS PRIMARY SWELL.

**EXAMPLE: PRIMARY SWELL FROM 330 DEGREES**  
**SECONDARY SWELL FROM 090 DEGREES**  
**ENTER: 33309**

ENTER: 55555					SECTION 2														
					WAVES														
SEA WAVES										SWELLS									
G R O U P	P E R I O D	H E I G H T	D I R E C T I O N F R O M					P R E D O M I N A N T S W E L L				S E C O N D A R Y S W E L L							
			I N D I C A	P R E D O M I N A N T S W E L L	S E C O N D A R Y S W E L L	I N D I C A	P E R I O D	H E I G H T (H a l f M)	I N D I C A	P E R I O D	H E I G H T (H a l f M)								
2	P <sub>W</sub>	P <sub>W</sub>	H <sub>W</sub>	H <sub>W</sub>	3	d <sub>w1</sub>	d <sub>w1</sub>	d <sub>w2</sub>	d <sub>w2</sub>	4	P <sub>W1</sub>	P <sub>W1</sub>	H <sub>W1</sub>	H <sub>W1</sub>	5	P <sub>W2</sub>	P <sub>W2</sub>	H <sub>W2</sub>	H <sub>W2</sub>
2					3	00	00	00	00	4					5				
2					3	00	00	00	00	4					5				
2					3	00	00	00	00	4					5				

# SHIP SYNOPTIC CODE PERIOD/HEIGHT OF PRIMARY SWELL (4Pw1Pw1Hw1Hw1)

- "Pw1Pw1": PERIOD OF PRIMARY SWELL
  - ENTER PERIOD AS ENTERED IN COL F OF PART A
- Hw1Hw1": HEIGHT OF PRIMARY SWELL IN 1/2 METERS.
  - HEIGHT OF SWELL ENTERED IN COL F OF PART A  
CONVERTED TO HALF METERS USING CODE TABLE III-4-4

## CODE TABLES

**TABLE III-4-4**

Wave Height in Half-Meters

Code figure	Height in feet	Code figure	Height in feet
00	calm	16	25 or 26
01	1 or 2	17	27 or 28
02	3 or 4	18	29
03	5	19	30 or 31
04	6 or 7	20	32
05	8	21	33 or 34
06	9 or 10	22	35 or 36
07	11 or 12	23	37
08	13	24	38 or 39
09	14 or 15	25	40
10	16	26	41 or 42
11	17 or 18	27	43 or 44
12	19 or 20	28	45
13	21	29	46 or 47
14	22 or 23	30	48
15	24	31	49 or 50

# SHIP SYNOPTIC CODE

## PERIOD/HEIGHT OF PRIMARY SWELL

### (4Pw1Pw1Hw1Hw1)

- EXAMPLE:** (COL F OF PART A)  
**SWELL FROM 360 DEG, PERIOD 6 SECS, HEIGHT OF 6 FT**  
**CODED ENTRY: 33600 40604**  
**NOTE:** 1. "00" IN 3 GROUP INDICATES NO SECONDARY SWELL.  
 2. 6 FT WAVES CONVERTS TO CODE FIGURE 4.
- ENTER: 40000 50000 IF NO SWELLS ARE PRESENT**

SECTION 2																			
WAVES																			
SEA WAVES										SWELLS									
G R O U P I N	P E R I O D		H E I G H T ( F		D I R E C T I O N F R O M					P R E D O M I N A N T S W E L L					S E C O N D A R Y S W E L L				
					I N D I C A T	P R E D O M S W E L L		S E C O N D S W E L L		I N D I C A T	P E R I O D		H E I G H T ( H a l f M e		I N D I C A T	P E R I O D		H E I G H T ( H a l f M e	
						01-36	01-36	01-36	01-36		01-36	01-36	01-36	01-36		01-36	01-36	01-36	01-36
2	P <sub>W</sub>	P <sub>W</sub>	H <sub>W</sub>	H <sub>W</sub>	3	d <sub>w1</sub>	d <sub>w1</sub>	d <sub>w2</sub>	d <sub>w2</sub>	4	P <sub>w1</sub>	P <sub>w1</sub>	H <sub>w1</sub>	H <sub>w1</sub>	5	P <sub>w2</sub>	P <sub>w2</sub>	H <sub>w2</sub>	H <sub>w2</sub>
2	0	3	0	2	3	3	6	0	0	4	0	6	0	4	5	0	0	0	0
2					3	3	3	0	6	4	0	3	0	2	5	0	5	0	3
2	0	0	0	0	3	0	0	0	0	4	0	0	0	0	5	0	0	0	0



# SHIP SYNOPTIC CODE

## PERIOD/HEIGHT OF SECONDARY SWELL

(5Pw2Pw2Hw2Hw2)

- ENTER SECONDARY SWELL PERIOD AND HEIGHT *IDENTICAL* TO PRIMARY PERIOD AND HEIGHT (4Pw1Pw1Hw1Hw1).

- **ENTER 0000 IF NO SECONDARY SWELL IS OBSERVED.**

SECTION 2																			
WAVES																			
SEA WAVES					SWELLS														
GROUP INDIC	PERIOD (SE		HEIGHT (Half I		DIRECTION FROM					PREDOMINANT SWELL					SECONDARY SWELL				
					INDICATOR	PREDOMINANT SWELL		SECONDARY SWELL		INDICATOR	PERIOD (SE		HEIGHT (Half Meter:		INDICATOR	PERIOD (SE		HEIGHT (Half Meter:	
2	P <sub>W</sub>	P <sub>W</sub>	H <sub>W</sub>	H <sub>W</sub>	3	d <sub>w1</sub>	d <sub>w1</sub>	d <sub>w2</sub>	d <sub>w2</sub>	4	P <sub>W1</sub>	P <sub>W1</sub>	H <sub>W1</sub>	H <sub>W1</sub>	5	P <sub>W2</sub>	P <sub>W2</sub>	H <sub>W2</sub>	H <sub>W2</sub>
2	0	3	0	2	3	3	6	0	0	4	0	6	0	4	5	0	0	0	0
2	0	0	0	0	3	3	3	0	6	4	0	3	0	2	5	0	5	0	3
2	0	1	0	1	3	0	0	0	0	4	0	0	0	0	5	0	0	0	0

# SHIP SYNOPTIC CODE

## WET BULB

### (8SwTbTbTb)

- **ICE ACCRETION** BLOCKS HAVE BEEN OMITTED FROM THIS COURSE. REFER TO 3144.1D SHOULD ICING CONDITIONS DEVELOP.
- OMIT THE ENTIRE GROUP FROM REPORT IF ICE IS NOT OBSERVED
- **WET BULB TEMPERATURE:**
- **“Sw”**: ENTER “0” FOR ZERO OR POSITIVE READING.
- **“TbTbTb”**: ENTER THE WET BULB TEMPERATURE IN TENS, UNITS AND TENTHS OF A DEGREE CELSIUS.

# TAKING/TRANSMITTING WEATHER OBSERVATIONS

- WHEN UNDERWAY AT SEA:

1. UNLESS A MET GUARD SHIP IS DESIGNATED THAT IS WITHIN 50NM (**SPECIFIED IN OPTASK METOC**)

- WHEN INPORT (NOT HOMEPORT):

1. UNLESS A MET GUARD SHIP DESIGNATED
2. VICINITY U.S MANNED WEATHER UNIT/SHIP.

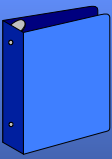
- DURING MINIMIZE CONDITIONS:

- WIND SPEEDS IN EXCESS OF 35 KNOTS
- SEAS 12 FT OR GREATER
- MODERATE OR HEAVY PRECIPITATION
- PRESSURE CHANGE 3MB OR GREATER DURING PAST 3 HOURS
- VISIBILITY <1NM.
- AS DICTATED BY OPERATIONS.

- REPORTING 3 HOURLY SYNOPTIC OBS:

TRANSMIT **IMMEDIATE** PRECEDENCE

- WINDS 34 KTS OR GREATER.
- SEAS 12 FT OR GREATER.
- WITHIN 300 NM OF TCFA (TROPICAL CYCLONE FORMATION ALERT).
- WHEN WITHIN 500 NM OF TROPICAL DEPRESSION, TROPICAL STORM, OR HURRICANE.



# METOC PUBLICATIONS

**-OPNAV 3140.24E (Warning's & Conditions of Readiness Re. Hazardous & Destructive Weather Phenomena)**

**-USCINCPACINST 3140.4 (METOC Support Manual)**

**-CINCPACFLT OPORD 201 ANNEX H**

**-C3F / C7F OPORD 201 BOOK II ANNEX H**

**-CNSP 3140.3B CNAP 3140.1B (METOC Support Doctrine)**

**-CNSP / CNSL 3140.2 (Tropical Cyclone Evasion)**

**-CNSP / CNSL 3840.1B (Joint Surf Manual)**

**-NAVMETOCCOMINST 3140.1K (METOC Support Manual)**

**-NAVMETOCCOMINST 3144.1D (Manual for Ship's Surface Weather Observations)**

**-C3F 262244Z Aug 93 (Hazardous Weather Avoidance & Reporting)**

# *Any questions?*

